What is claimed is:

1. A launch tube assembly comprising:

an aft launch tube portion, said aft launch tube portion having a forward open end and a rear closed end for housing a gas generator;

a transfer sleeve having a first end fixed to and adjacent the forward open end of said aft launch tube portion and a second end;

a forward launch tube portion positioned within said transfer sleeve adjacent the second end thereof and selectively adjustable with respect to a longitudinal axis of said transfer sleeve, said forward launch tube portion having a forward end and a rear open end, the rear open end facing the forward open end of said aft launch tube portion, an adjustable plenum being defined as a volume within said transfer sleeve defined by a distance between the forward end of said aft launch tube portion and the rear end of said forward launch tube portion, said forward launch tube portion being provided to house a launch tube device; and

an end cap pinned to the forward open end of said forward launch tube portion.

2. The assembly according to claim 1 wherein the first end of said transfer sleeve is fixed to said aft launch tube portion by welding.

3. The assembly according to claim 1 further comprising:

an outward radial flange having plural apertures formed therein at the second end of said transfer sleeve;

a threaded region on a longitudinally intermediate outer surface portion of said forward launch tube portion;

a locking collar having an inner annular threaded surface and an outward radial flange having plural apertures therein, the plural apertures of said transfer sleeve flange aligned with the plural apertures of said locking collar; and

plural bolts secureable through respective and aligned ones of said plural apertures of said transfer sleeve and said locking collar.

4. The assembly according to claim 3 further comprising a sealing material positioned between adjacent surfaces of said forward launch tube portion and said transfer sleeve.

5. The assembly according to claim 4 wherein said sealing material is at least one o-ring.

6. The assembly according to claim 4 wherein said sealing material is adjacent the rear end and on an outer peripheral surface of said forward launch tube portion.

7. The assembly according to claim 3 wherein the threaded surface of said forward launch tube portion engages with the threaded surface of said locking collar, thereby enabling longitudinal movement of said forward launch tube portion with respect to said aft launch tube portion.

8. The assembly according to claim 1 wherein an inner dimension of said transfer sleeve corresponds to an outer dimension of each said aft and forward launch tube portions.

9. The assembly according to claim 1 wherein an adjustably selected volume of said plenum is such that a gas generated by the gas generator will enable propulsion of the launch tube

device at a predetermined acceleration from said forward launch tube portion.

10. The assembly according to claim 1 wherein the interior surface of the second end of said transfer sleeve is threaded, and the exterior of the rear end of the forward launch tube portion is threaded.

11. The assembly according to claim 1 further comprising a ram plate sliadably positioned in said forward launch tube portion at said rear open end of said forward launch tube portion.

12. A launch tube assembly comprising:

an aft launch tube portion, said aft launch tube portion having a forward open end and a rear closed end;

a transfer sleeve having a first end fixed to and adjacent the forward open end of said aft launch tube portion and a second end;

a forward launch tube portion positioned within said transfer sleeve adjacent the second end thereof and selectively adjustable with respect to a longitudinal axis of said transfer sleeve, said forward launch tube

portion having a forward end and a rear open end, the rear open end facing the forward open end of said aft launch tube portion, an adjustable plenum being defined as a volume within said transfer sleeve defined by a distance between the forward end of said aft launch tube portion and the rear end of said forward launch tube portion;

an end cap pinned to the forward end of said forward launch tube portion;

a gas generator positioned within said aft launch tube portion at the rear closed end thereof; and

a launch tube device housed within said forward launch tube portion between said end cap and the rear open end of said forward launch tube portion.

13. The assembly according to claim 12 further comprising a ram plate slidably positioned in said forward launch tube portion at said rear open end of said forward launch tube portion between said launch tube device and said gas generator.

14. The assembly according to claim 13 wherein:

said transfer sleeve has an outward radial flange having plural apertures formed therein at the second end of said transfer sleeve;

said forward launch tube portion has a threaded region on a longitudinally intermediate outer surface portion of said forward launch tube portion;

said assembly further comprising:

a locking collar having an inner annular threaded surface and an outward radial flange having plural apertures therein, the plural apertures of said transfer sleeve being aligned with the plural apertures of said locking collar, and the inner annular threaded surface being engageable with the threaded surface of said forward launch tube portion; and

plural bolts secureable through respective and aligned plural apertures of said locking collar and said transfer sleeve.